- Grade Level: 7
- Subject Areas:
 Social Studies, Science
- Duration:
 Pre-visit: 2 hours
 Visit: 1 day, on-going
- Setting: Classroom and Mission
- Skills:

Social Studies: 7.21E Support a point of view on a social studies

issue

Science: 7.14B Analyze effects of

weathering

7.14C Make inferences and draw conclusions about effects of

human activity

- Charting the Course:
 In this lesson, the scientific
 concept of weathering is applied to
 the preservation of historic sites.
 There is an overall connection
 between human presence and our
 environmental impact that extends
 to our ethical responsibility and the
 consequences of our
 action/inaction.
- Essential Terms: erosion, weathering, vandalism, ethics, environmental impact

ENVIRONMENTAL INTERACTIONS

Big Idea
What can we do to
minimize our impact on
San Antonio Missions
National Historical Park
and its water system?

Objectives

Students will:

- Explain the physical effects of weathering and erosion on historic sites
- Dramatize the need for park ethics
- Assess our possible impacts on the Missions and their water systems

Making Connections

Materials

Engagement (pre-visit):

 enlargement or overhead transparency of the picture of the Rose Window at San José Mission

Exploration (pre-visit):

- hair dryer
- watering can
- ♦ sand/dirt
- rectangular baking pan
- several small- to medium-sized rocks

Elaboration (pre-visit):

 "Park Ethics" sheet – each behavior cut as a separate strip

Engagement (Pre-visit):

Show the students the picture of the Rose Window at San José Mission, and tell them "This window is part of the original church at Mission San José. The bottom of the window currently sits about two feet below groundlevel, although it has been dug

Elaboration (Pre-visit):

- 1. Present the following statement on the board: Take nothing but photographs, leave nothing but footprints. Elicit student response as to why this is applicable to a historic site.
- 2. Cut out strips from Park Ethics sheet. Give one strip to each group of three. The group will prepare and present a quick skit/dialogue that explains the rule and persuades others of its importance in preserving our historic sites.
- 3. Discuss how families preserve cherished items (e.g. only use "best" china for special occasions). We can use and enjoy things, but we have to be responsible and take care of them.

Evaluation (Visit/Post-visit):

- 1. Encourage students to remember their potential impact on the Missions and their water systems during their visit. They should be expected to monitor their own behavior.
- 2. During and after the site visit, discuss evidence of environmental impact both negative and positive. This may include litter from previous visitors, vandalism, restoration projects, etc.
- 3. Working in small groups, "rewrite" the park ethics in such a way that kids their age could relate to and respect the national historical park.



The Rose Window

Park Ethics

DO NOT LEAN AGAINST THE WALLS OF MISSION STRUCTURES. Note: some have historic frescoes on them and most have the original plaster on them.

DO NOT SIT OR WALK ON FOUNDATION WALLS.

Note: The walls are built of rock and some are only 2-3 feet high.

BE CONSIDERATE OF OTHER VISITORS TO THE NATIONAL PARK.

PICK UP AND REMOVE ALL LITTER WHETHER IT IS YOURS OR NOT.

ANY UNAUTHORIZED REMOVAL OF ROCKS, FOSSILS, OR ARTIFACTS IS PROHIBITED.

ANY UNAUTHORIZED REMOVAL OF PLANT OR ANIMAL LIFE IS PROHIBITED.

DAMAGE TO VEGETATION, ANIMALS AND/OR THEIR HABITATS IS PROHIBITED.

BE AWARE AND CONSIDERATE THAT THESE ARE RELIGIOUS STRUCTURES. Remember the churches still hold worship services.

DEFACING ANY HISTORIC STRUCTURE IS PROHIBITED.

ANY UNAUTHORIZED DIGGING IS PROHIBITED